

Reducing Infant Mortality in the United States Through "Healthy Start"

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WHEN THE ANNUAL REDUCTIONS in infant mortality for the United States are compared with international standards, our country comes off poorly. Twenty-three countries have lower rates than we do. Our infant mortality rate is twice that of the nation with the lowest rate, Japan.

But we are making progress. Infant mortality continues to decline in the United States. The Secretary of Health and Human Services, Dr. Louis W. Sullivan, announced just 2 weeks ago that the infant mortality rate in the United States has reached a new low.

The 1990 provisional rate is 9.1 infant deaths per 1,000 live births, a drop from the provisional estimate of 9.7 percent for 1989 (fig. 1). It represents the biggest single-year decline in a decade, and it is extremely close to our 1990 Objectives for the Nation goal of 9.0.

We do not know all the reasons why it dropped so significantly in a single year, but we do have some early findings that give us an idea. We are saving a higher percentage of babies with respiratory distress syndrome, thanks to the development, in record approval time, and use of a surfactant, Exosurf Neonatal, that coats the inside of an infant's lungs. However, this marvelous drug represents damage control, not prevention, of low birth weight. The surfactant does not prevent the need for—nor does it lower the costs of—newborn intensive care services.

We believe that the decline may also be related to efforts to increase access to care. As of April 1990, all pregnant women and their children up to age 6 years living in families with incomes below 133 percent of the Federal poverty level are now eligible for Medicaid-funded services. Federal legislation allows States to expand coverage even further. Twenty-four States have taken advantage of

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The conference was a joint endeavor of the March of Dimes, the American College of Obstetricians and Gynecologists, and the American Academy of Pediatrics.

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this and expanded eligibility to the optional higher levels ranging from 140 to 185 percent of poverty. Eighteen of the 24 States have expanded eligibility to 185 percent of poverty.

We also believe a percent of the decline may be related to the success of public and private programs designed to decrease illegal drug, alcohol, or tobacco use by pregnant women. Some of the decline may also be related to more births during 1990 to women at low risk for low birth weight and infant mortality.

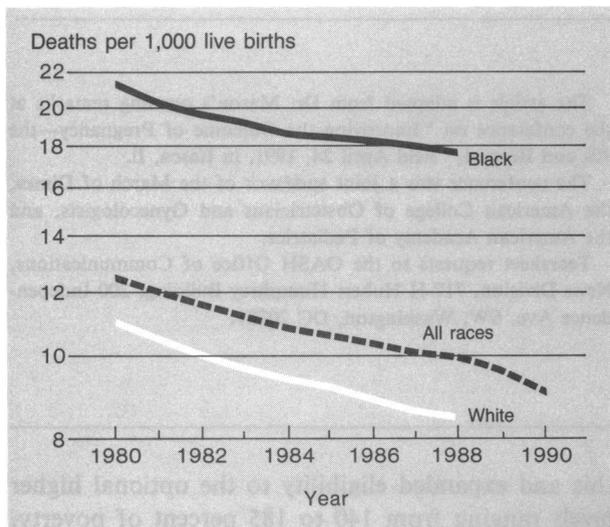
We are encouraged by these preliminary numbers. However, I do not want to imply that the Public Health Service is satisfied with the current rate of infant deaths. As a nation, we have a long way to go.

The Public Health Service subscribes to the goals set forth in "Healthy People 2000" (1), a compilation of 300 national health promotion and disease prevention objectives. Three of these objectives call for reducing infant mortality to no more than 7 infant deaths—4.5 neonatal deaths and 2.5 post-neonatal deaths per 1,000 live births—by the turn of the century. To accomplish these objectives, vast disparities in health status among populations must be overcome. Even when we reach the Year 2000 goal of 7 infant deaths in a 1,000, we will still be above Japan's current infant mortality rate.

Infant Mortality, 1983–85

Infant mortality data for our minority citizens are enlightening. In 1983 through 85, the infant mortality rate among Japanese Americans already was below the Healthy People 2000 objective for all Americans (fig. 2). The rate among Japanese Americans was 6.0 infant deaths per 1,000 live births during 1983 through 85. The rate for those

Figure 1. Infant mortality trends in the United States, 1980-90



with white mothers was 9.0. Among Hispanics, there was wide variation in infant mortality rates. It ranged from a low of 8.0 among Cubans to a high of 12.3 among Puerto Ricans. Mexican Americans, the largest group, have an infant mortality rate of 8.8, which is a rate lower than that of white mothers. The American Indian rate, 13.9, and the black rate, 18.7, were respectively 1.5 and 2.1 times the rate for white mothers. These mortality rates along with data on early prenatal care, insurance coverage, economic status, and marital status are the elements of an interesting story.

Early Prenatal Care, 1988

The importance of beginning prenatal care early in pregnancy, especially for women known to be at increased medical or social risk of adverse outcomes, is well documented. That is why one of the objectives in "Healthy People 2000" is to increase to at least 90 percent the proportion of all pregnant women who receive prenatal care in the first trimester of pregnancy. To accomplish this objective, once again we must overcome vast disparities in the receipt of early prenatal care according to the mother's race and ethnic heritage. Figure 3 shows the extent of the disparities.

In 1988, only 58 percent of American Indian and Mexican American mothers received early prenatal care. Sixty-one percent of black mothers and 63 percent of Puerto Rican and Central and South American mothers received early care. The proportion of mothers with early prenatal care was much higher among Japanese mothers at 86 percent; they were followed closely by Cuban mothers at 83

percent; then Chinese mothers at 82 percent; white mothers at 79 percent, and Filipino mothers at 78 percent.

Between 1970 and 1980, the percentage of women receiving early prenatal care increased from 68 to 76 percent and has since remained stable. Much of the lack of progress is associated with the increasing proportion of births to unmarried mothers, who are much less likely than married mothers to begin care early.

Married mothers are significantly more likely to receive early prenatal care. The following 1988 statistics for pregnant women show the marked differences.

Race or ethnic group	Percent receiving early care	
	Married	Single
Total	83	55
Black	74	54
White	84	57
Puerto Rican	73	55
Cuban	88	59
Mexican American	63	49

Note that 83 percent of all married mothers of all races received early prenatal care versus 55 percent of unmarried mothers.

There are obvious reasons why unmarried women receive less prenatal care. What does social science tell us about having a mother and father at home? The common denominator to many of the problems that are plaguing infants and older youth today is not just race or poverty, it is family structure. While there are conditions and behavior patterns that make for family success regardless of family structure, study after study has shown that the presence of both a mother and a father greatly enhances the life chances of infants and children.

Our country now has the highest rate of single parent households of all industrialized nations. In 1988, one in five U.S. households with dependent children was headed by a single parent. Nowhere is the trend more apparent than in the black community, where 70 percent of the children spend at least part of their childhood living with one parent.

We have heard a good deal of talk in recent years about the feminization of poverty. Michael Novak has correctly captured another aspect of the problem when he refers to the "masculinization of irresponsibility in talking about the problems single parenthood inflicts on children."

Health Insurance Coverage

Health insurance coverage is yet another factor to take into account when we look at early prenatal

care. We know that among people under age 65, those who are older, have more education, have higher incomes, and those who are in better health are more likely than others to have some form of private health insurance. We know that health care utilization rates are lower for those who have no insurance than for people who do. And, we also know mothers with insurance are more likely to have prenatal care. There is a direct correlation between insurance coverage and prenatal care, although having insurance does not guarantee that a woman will seek or receive early prenatal care.

Variations in health care coverage among racial and ethnic groups are large (fig. 4). About 35 percent of the Mexican American population under 65 years had no health care coverage during 1983 through 1986. Twenty-two percent of blacks, 21 percent of Puerto Ricans, and 23 percent of Cubans were without coverage—compared with 12 percent of whites and 16 percent of Asians.

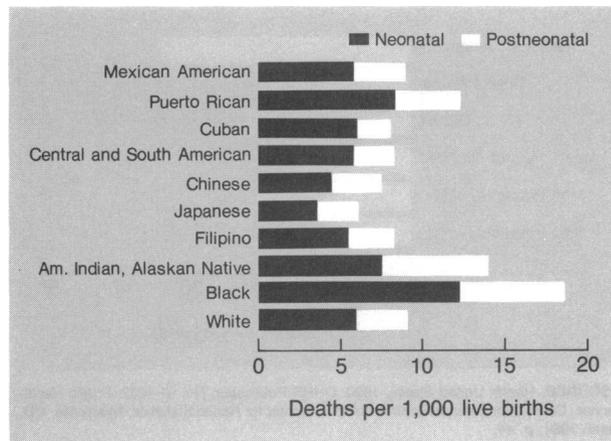
The Mexican American Difference

These data tell us a story—a story that I believe is critical to future dramatic improvements in the life and health of our nation's infants. The data illustrate that despite widespread poverty, despite the fact that 35 percent of the population lacks health insurance, and despite the fact that only 58 percent of mothers receive early prenatal care, Mexican American mothers have an infant mortality rate that is only slightly worse than that of white mothers.

Babies born to Mexican American mothers who had late or no prenatal care had only a 7.2 percent risk of low birth weight. That compares with 9.5 percent for whites and 18.3 percent for blacks. The rate of low birth weight babies among Mexican Americans overall is only marginally higher than for whites—5.7 percent versus 5.6 percent. These observations pose the thought-provoking question. What is the Mexican American edge? Undoubtedly there are a number of explanations. However, we cannot overlook individual behavior, traditional values, and family support systems.

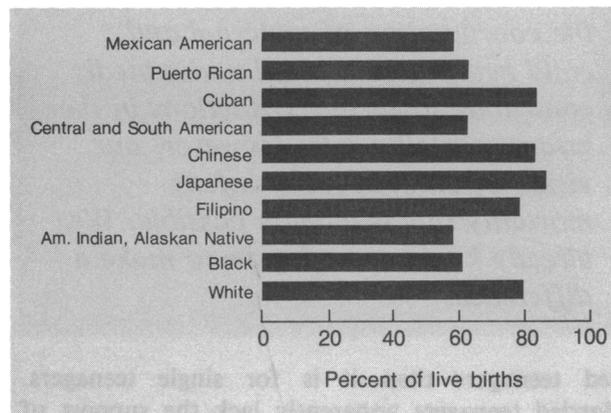
Bryce J. Christensen reviewed a number of studies in an article published in January 1991 by the Rockford Institute Center on the Family in America (2). In 1986 a study of infant mortality in California raised the possibility that fewer Mexican American infants die in part because of “a higher regard for parental roles” than is found in other ethnic groups. The report continued, “The lower incidence of nonmarital births among Latinos as

Figure 2. Infant mortality rates according to race or ethnicity of the mother, United States, 1983-85 birth cohorts



NOTE: Data on Hispanic origin of mother are from 23 States and the District of Columbia. SOURCE: National Center for Health Statistics, National Vital Statistics System.

Figure 3. Early prenatal care according to the race or ethnicity of the mother, United States, 1988



NOTE: Early prenatal care is defined as care beginning in the first trimester of pregnancy. Data on Hispanic origin of mother are from 30 States and the District of Columbia.

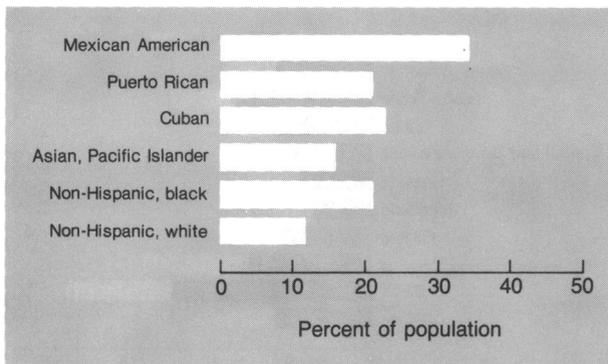
SOURCE: National Center for Health Statistics, National Vital Statistics System.

compared with Blacks is suggestive of a possible differential in parental attitudes” (2).

A 1987 Chicago study explained the disparity in deaths of black and Mexican American infants by sharp differences in “cultural patterns and lifestyles.” There was no difference in income. The authors went on to say, “Mexican-American mothers tended to be older, married, less educated, and less likely to be recipients of welfare or food stamps during pregnancy than black mothers” (2).

Another study examined the national birth and death files for 3.4 million infants born in 1983. The researchers concluded that for both whites and blacks, married women did better during pregnancy and had lower rates of neonatal mortality (2). However, postneonatal mortality is higher for mar-

Figure 4. Percentage of U.S. racial or ethnic groups under age 65 without health insurance, 1983-86



SOURCE: Health United States, 1990. DHHS Publication No. 91-1232, Public Health Service, Centers for Disease Control, National Center for Health Statistics, Hyattsville, MD, March 1991, p. 44.

'Future advances in biomedical research, medical effectiveness, and the coordination of maternal and child health services will undoubtedly contribute to further reductions in the infant mortality rate. However, our vision of an even lower infant mortality rate is already possible. We already know enough now to make a difference.'

ried teenagers than it is for single teenagers. Married teenagers apparently lack the support of home and family.

It appears that there are marked differences in the behavior of pregnant Mexican American women compared with groups that have high infant mortality. Among the behavioral factors known to contribute to adverse birth outcomes are smoking, alcohol and drug use, and poor nutritional habits during pregnancy. The caring, supporting role of the extended family, which is a tradition in the Mexican American culture, and the more frequent presence of the baby's father, must also make a difference. The interesting observation is that the more Americanized the Mexican American mother is, the higher the infant mortality rate.

What Needs to be Done?

Protecting the unborn baby with good maternal nutrition and freedom from the toxic effects of tobacco, alcohol, and drugs is clearly the way.

Individual behavior and the protective effects of marriage on infant health are well documented. Because the institutions of marriage and the family network of support are the best "department of health and human services," government programs need to reward and reinforce marriage and family, and not encourage single parent households. The nurturing and loving care of the babies by family members provides the mother needed support during the pregnancy and neonatal and post natal-periods.

Of course, early access to comprehensive prenatal care is fundamental to the overall decline in infant mortality in this country, but the basis for a complete success lies in a person's own behavior. Without responsible behavior, the design of any public health effort to reduce infant mortality is immediately flawed.

"Healthy Start"

That's why the Administration's new initiative to reduce further America's infant mortality rate is promising. It includes all three components for success: good medicine, better outreach, and best behavior.

The initiative is called Healthy Start. It includes strategies that will lead to realization of our fundamental goal—a significant reduction in low birth weight and the infant mortality rate in the near term.

However, good doctors and good medicine are not enough. To get there we will need to make progress on other public health objectives related to the focus of this pilot project, objectives like these.

- improving access to and quality of prenatal care,
- reducing the incidence of low birth weight babies,
- reducing prenatal substance abuse,
- decreasing unwed teenage pregnancies,
- narrowing minority health disparities,
- lessening the trend toward single-mother-headed households, and
- revitalizing the family and its role in nurturing and caring for babies and children.

The Healthy Start Initiative will expand on existing efforts by designating \$25 million in 1991 new money and \$171 million in 1992 specifically for this infant mortality pilot project.

The specific goal is to reduce infant mortality by 50 percent over 5 years in 10 U.S. communities with extremely high infant mortality rates. To do

all this, we will concentrate on four major factors associated with low birth weight and infant mortality.

First, grantees will increase Medicaid enrollment and providers. They will augment Community Health Center clinics, and promote outreach, case management services and integrated services, and eligibility, so as to increase expectant mothers' access to early prenatal care.

Second, grantees will address the social value system that leads to negative personal behaviors and irresponsible action by expectant mothers and fathers; they will promote family and a culture of character.

Third, grantees will enhance the content of prenatal care to include treatment programs to deal with the major behavior-related causes of infant mortality—alcohol, drugs, smoking, poor nutrition, and high-risk sexual behavior.

Fourth, and finally, since infant mortality rates in the United States vary significantly from area to area, we will target these efforts to the local needs of communities with high infant mortality rates.

Funds will be awarded on a competitive basis to committed communities with infant mortality rates above 15.7 live births per 1,000, communities that are able to demonstrate that, with additional resources, they can lower infant mortality by at least 50 percent in 5 years. Applications must be received by July 15, 1991, for consideration. The participating communities must be willing to conduct a rigorous program evaluation. We anticipate that support will continue at the fiscal 1992 level if communities make satisfactory progress in meeting their goals.

These are demonstration projects, designed to be replicated so that all of America can benefit from what communities learn from the results of these pilot projects. Healthy Start will demonstrate that

infant mortality rates can be lowered rapidly, even in our communities with the worst records.

Conclusion

Repeatedly in the history of our nation's health, the grand march of inquiry has been stalled until new technologies arose to make new visions possible. Future advances in biomedical research, medical effectiveness, and the coordination of maternal and child health services will undoubtedly contribute to further reductions in the infant mortality rate. However, our vision of an even lower infant mortality rate is already possible.

We already know enough now to make a difference. To paraphrase Mark Twain, "It isn't the things I don't understand that worry me; it's the things I do understand." Like Twain, we need to be concerned about the things we do understand. We know enough right now to make a significant dent in the infant mortality rate and reach our goals for the Year 2000.

What we know is not the problem, but acting on the problem is our challenge. Babies, after all, are the nation's most important product.

With good medicine for all, better outreach, and best behavior, we can do as well as the Japanese. We must move ahead simultaneously on all three fronts.

References

1. Public Health Service: Healthy people 2000: national health promotion and disease prevention objectives. DHHS Publication No. (PHS) 91-50212. Office of the Assistant Secretary for Health, Office of Disease Prevention and Health Promotion. U.S. Government Printing Office, Washington, DC, 1990.
2. Christensen, B. J.: Imperiled infants: a legitimate concern. *The Family in America* 5: 1-8, January 1991.